

MICHIGAN

Science and Engineering Profile

	MI	U.S.	Rank		MI	U.S.	Rank
Doctoral scientists, 1995	12,724	453,928	12	Total R&D performance, 1995 (millions)	\$13,275	\$177,210	2
Doctoral engineers, 1995	3,306	86,738	8	Industry R&D, 1995 (millions)	\$12,388	\$130,332	2
S&E doctorates awarded, 1996	1,073	27,230	8	Academic R&D, 1995 (millions)	\$755	\$21,606	8
of which, in engineering	27%	23%		of which, in life sciences	55%	55%	
in life sciences	23%	25%		in engineering	19%	16%	
in social sciences	15%	15%		in social sciences	8%	5%	
S&E postdoctorates, 1995	1,198	35,379	7	Higher education current-fund expenditures, 1995 (millions)	\$6,252	\$182,602	8
in doctorate-granting institutions							
S&E graduate students, 1995	16,913	436,328	8	Number of SBIR awards, 1990-1996	474	26,399	15
in doctorate-granting institutions				Patents issued to state residents, 1996	3,179	61,099	4
Population, 1996 (000s)	9,594	269,067	8	Gross state product, 1994 (billions)	\$240.4	\$6,876.0	9
Civilian labor force, 1996 (000s)	4,807	135,528	8	of which, agriculture	1%	2%	
Personal income per capita, 1996	\$24,810	\$24,231	17	manufacturing, mining, construction	34%	23%	
Federal spending				transportation, communication, utilities	7%	9%	
Total expenditures, 1996 (millions)	\$39,287	\$1,368,858	9	wholesale and retail trade	15%	16%	
R&D obligations, 1995 (millions)	\$688	\$67,080	22	finance, insurance, real estate services	15%	19%	
				government	18%	20%	
					11%	13%	

Rankings and totals are based on data for the 50 states, D.C., and Puerto Rico.

Data on S&E postdoctorates and S&E graduate students include health fields.

Federal Obligations for Research and Development in Michigan by Agency and Performer: Fiscal Year 1995

[Thousands of Dollars]

	Total	Federal intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank
Total, all agencies	688,376	82,008	0	155,055	397,365	49,778	4,170	22
Department of Agriculture	20,205	5,836	0	158	14,211	0	0	25
Department of Commerce	47,728	6,483	0	38,426	1,086	1,604	129	6
Department of Defense	219,678	63,185	0	93,743	33,624	29,126	0	24
Department of Energy	13,779	0	0	265	12,477	1,037	0	30
Dept. of Health & Human Services	254,994	0	0	7,270	238,050	7,656	2,018	13
Department of the Interior	6,792	6,487	0	0	305	0	0	18
Department of Transportation	9,416	17	0	3,061	4,315	0	2,023	16
Environmental Protection Agency	21,217	0	0	6,722	12,267	2,228	0	7
Nat'l Aeronautics & Space Admin.	22,263	0	0	3,438	13,156	5,669	0	23
National Science Foundation	72,304	0	0	1,972	67,874	2,458	0	9
State rank	22	24	na	24	9	12	16	

Federal R&D obligations are as reported by funding agencies.

FFRDC = federally funded research and development center

SBIR = small business innovation research

na = not applicable